

MEMORANDUM

TO: Tim Luke & Allen Merritt

FROM: Corey Skinner

DATE: August 19, 2002

SUBJECT: Complaint Regarding Water Delivery and Visit to Muldoon Creek Water District (37-O)

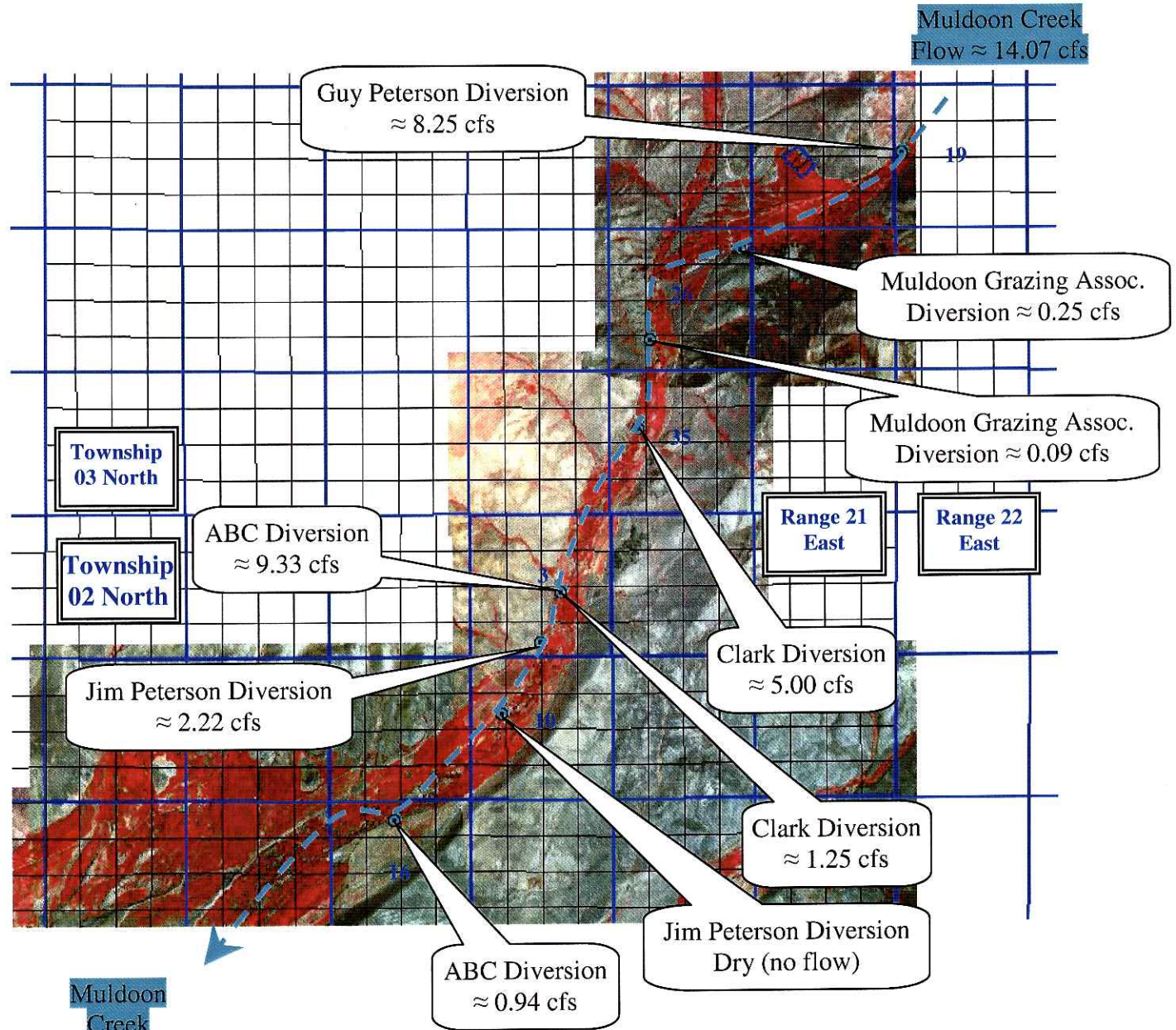
On August 8th, I received a telephone complaint from Arlan Crouch of ABC Agra regarding water delivery on Muldoon Creek. Mr. Crouch indicated that upstream users, in particular one individual, were diverting water with a junior priority at the expense of downstream users with senior priority rights. I offered to come up and investigate the situation, if Mr. Crouch could get things set up with the watermaster. It was agreed upon to meet on August 14th. I proceeded to conduct some initial water right research to prepare for my visit.

On August 14th, I met with Blair Crouch (Arlan's son) and Jim Peterson, the Muldoon Creek Watermaster. We reviewed the water right and adjudication claim information for the area and then went and looked at individual diversions and made measurements of the diverted flow by determining cross sectional areas and velocities. In summary, it appears that there are issues with most of the water rights and corresponding claims on the creek. These issues relate to over claiming of some rights, improper ownership information on some rights, inaccurate point of diversion descriptions, etc. The diversions from Muldoon Creek consist of mostly rock check dams in the creek with open channels leading to areas where pasture is irrigated. There are no lockable diversion works or measuring devices on any of the diversions that I observed. In addition, it appears that there is one obvious over diversion that prompted Mr. Crouch's initial call.

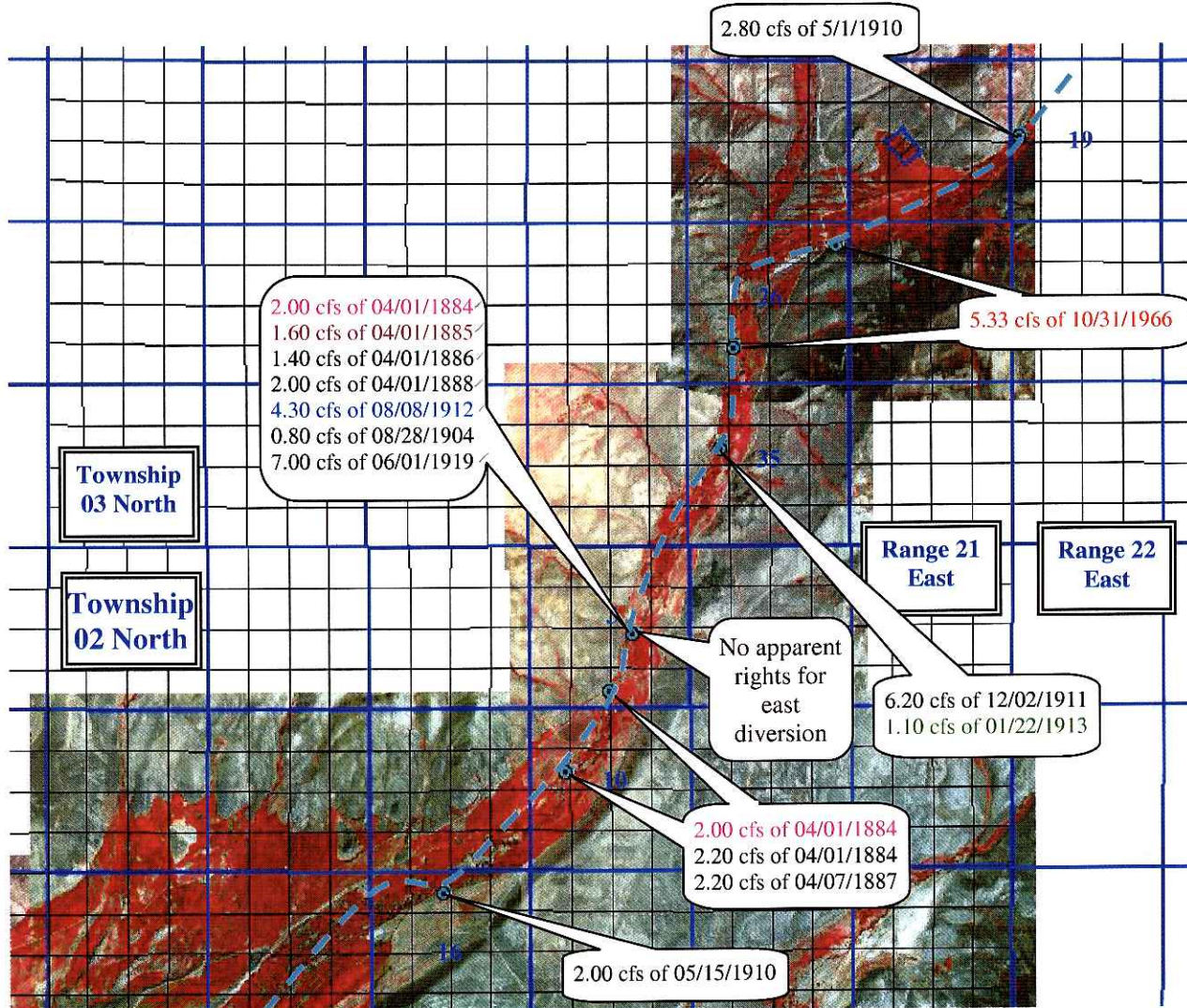
The obvious over diversion, consists of Guy Peterson's towards the upper end of the creek. Guy Peterson's right, 37-1143, allows for the diversion of 2.80 cfs from Muldoon Creek, but the actual diversion was measured at approximately 8.25 cfs, which was more than half the flow in the creek (measured at approximately 14.07 cfs).

The attached images show the locations of the diversions and the measurements that were made, a distribution of the individual rights per diversion, and photos documenting the individual diversions. It should be noted that not very many of the rights show the correct point of diversion, but the points of diversion on the map were GPSed, and the rights were assigned to their most likely diversion point on the map on page 3.

August 14, 2002 Diversion Locations & Measurements from Upper Muldoon Creek (Water District 37-O)

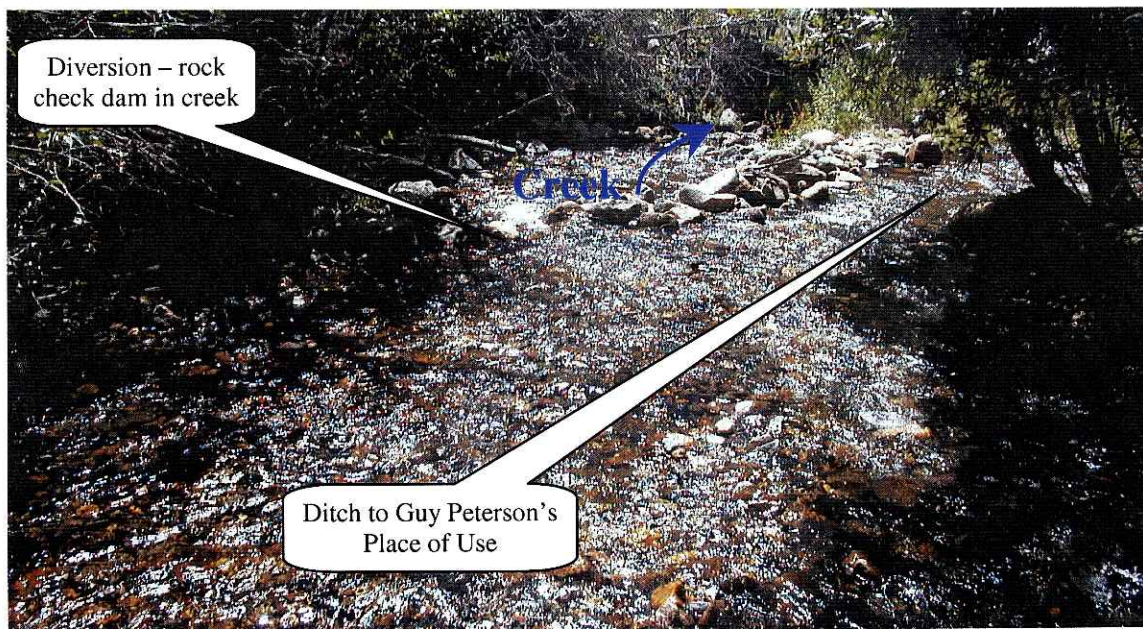


Apparent Distribution of Water Amounts and Priority Dates per Diversion



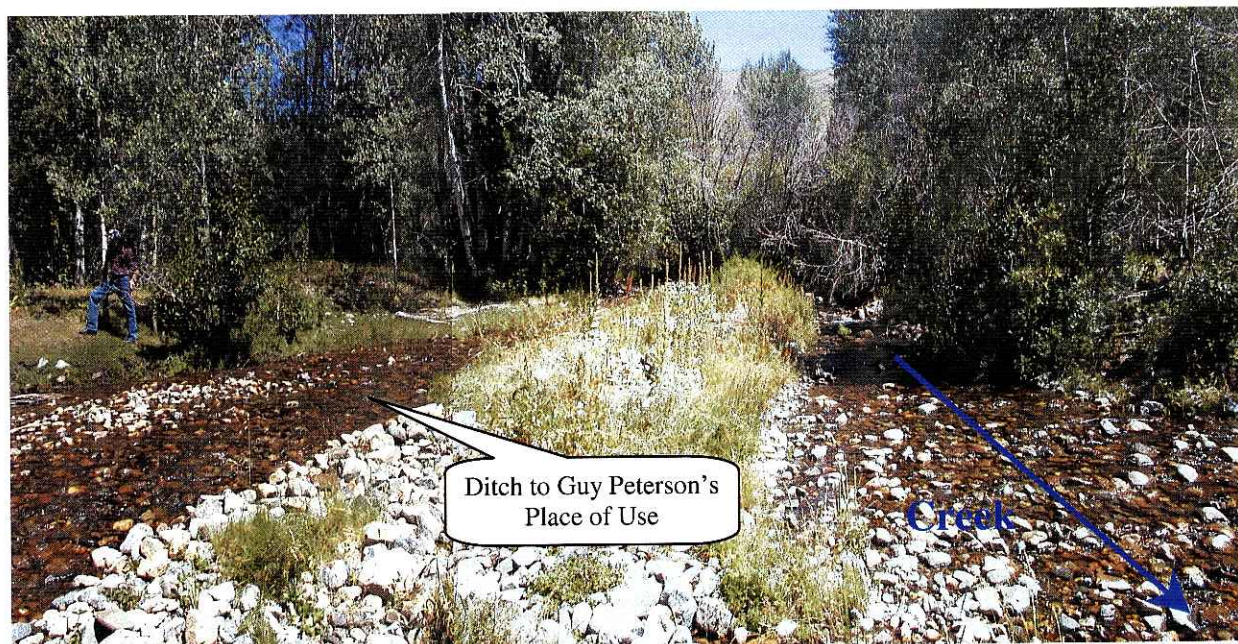
Muldoon
Creek

- Water Right 37-2751 (no source in database) but Muldoon Creek listed on claim & license
- Water Right 37-1120 from unnamed stream rediverted from Muldoon Creek
- **OVERCLAIMED** – Competing claims 37-1048 & 37-1048A filed for entire portion of decree 37-1048
- **OVERCLAIMED** – Claims 37-1046, 37-1046A, and 37-1046B totaling 1.84 cfs all based on decree 37-1046 for 1.60 cfs (all claims probably diverted through ABC ditch)
- **OVERCLAIMED** – Claims 37-2243 & 37-2243B totaling 4.50 cfs based on license 37-2243 for 4.30 cfs of wastewater from Last Chance Mine and rediverted downstream from Muldoon Creek. (Both claims probably diverted through ABC ditch)



ABOVE: View looking down Muldoon Creek showing the Guy Peterson Diversion in the SWNW $\frac{1}{4}$ of Section 19 (T03N, R22 E). The flow in the creek above the diversion was measured at 14.07 cfs, and the flow through the diversion ditch was measured at 8.25 cfs. Guy Peterson's water right authorizes a diversion of 2.80 cfs.

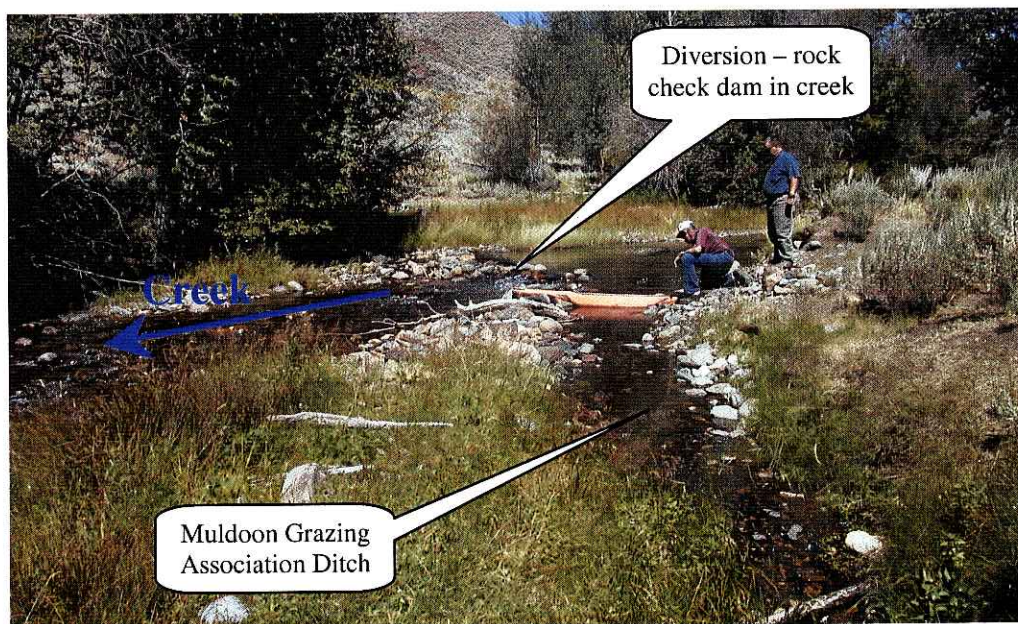
BELOW: View from below area shown in photo above, looking upstream, showing water flow in Guy Peterson's ditch and remaining flow in Muldoon Creek.

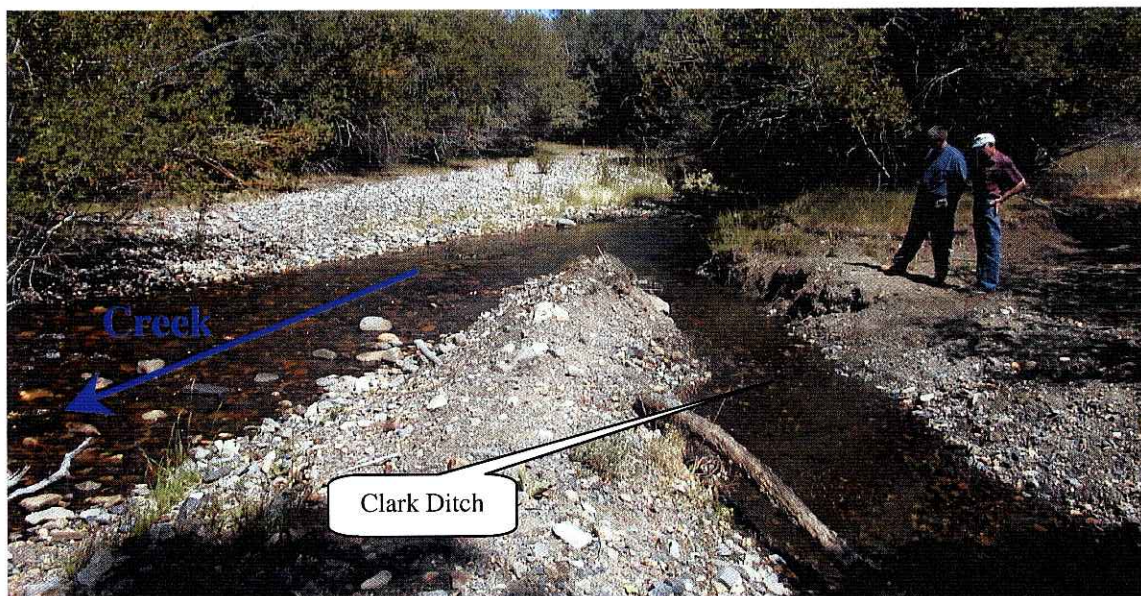




ABOVE: View looking up the Muldoon Grazing Association ditch towards the diversion located in the NENE $\frac{1}{4}$ of Section 26 (T03N, R21E). There was only about 0.25 cfs being diverted from the creek at this diversion.

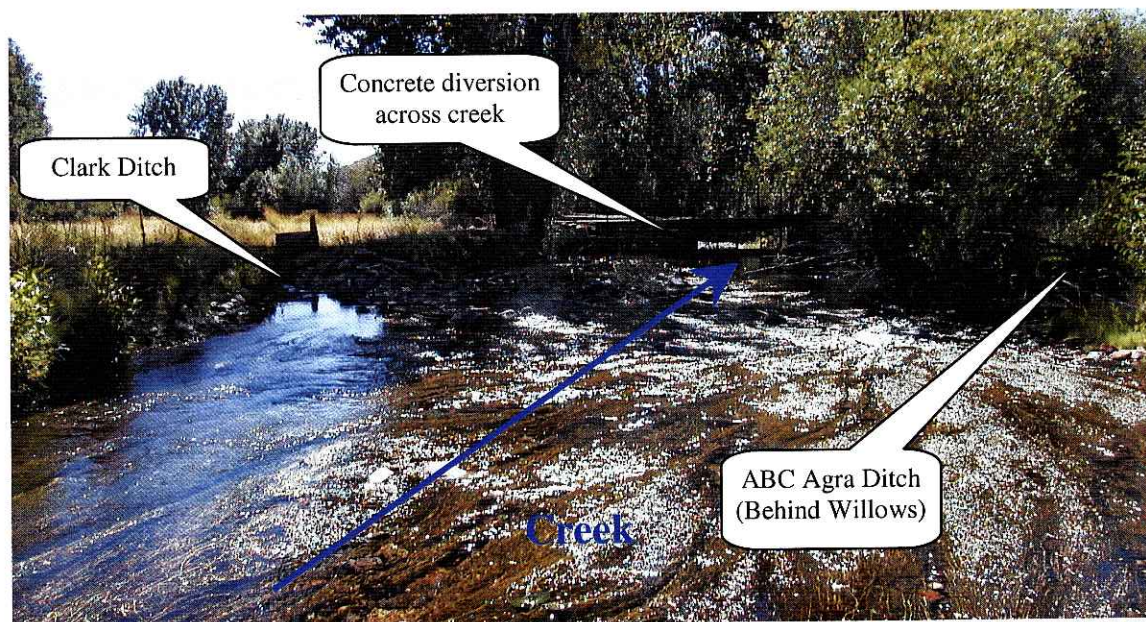
BELOW: View looking up the Muldoon Grazing Association ditch towards the diversion located in the SESW $\frac{1}{4}$ of Section 26 (T03N, R21E). The orange canvas dam in this view has essentially shut off this diversion, but approximately 0.09 cfs was leaking under the dam.





ABOVE: View looking up the Clark Ditch showing the diversion in the SWNW $\frac{1}{4}$ of Section 35 (T03N, R21E). Approximately 5.00 cfs was being diverted at this location.

BELOW: View looking downstream, showing the location of the Clark Diversion and the ABC Agra Diversion in the NWSE $\frac{1}{4}$ of Section 3 (T02N, R21E). There was approximately 1.25 cfs flowing through the Clark Ditch and approximately 9.33 cfs of water flowing through the ABC Agra diversion. Note that the Clark's do not appear to have a water right authorizing a diversion at this location.

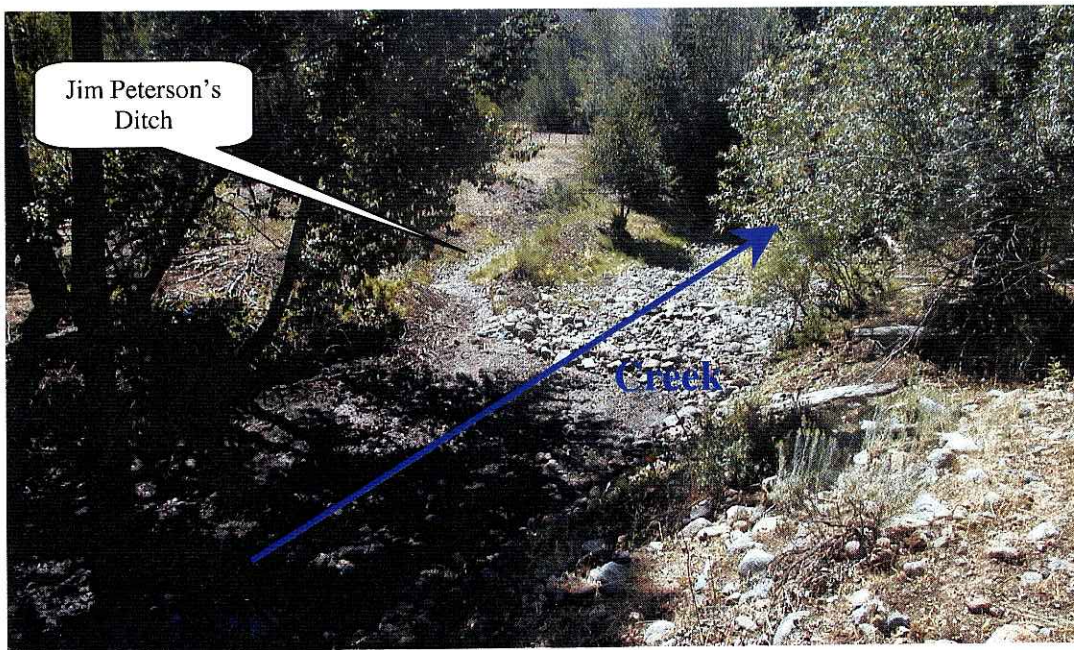




ABOVE: View looking up the ABC ditch towards the diversion in the NWSE $\frac{1}{4}$ of Section 3 (T02N, R21E). Approximately 9.33 cfs was flowing through the ABC Ditch from this diversion.

BELOW: View looking down Muldoon Creek showing Jim Peterson's diversion in the SESW $\frac{1}{4}$ of Section 3 (T02N, R21E). Note all the creek flow (measured at 2.22 cfs) is being diverted at this point





ABOVE: View looking down Muldoon Creek showing Jim Peterson's diversion in the SWNW ¼ of Section 10 (T02N, R21E). Note the dry creek in this reach.

BELOW: View further downstream, showing ABC Agra's diversion in the NENW ¼ of Section 16 (T02N, R21E). Note water being diverted from the creek in this view, further downstream than dry stretch of creek shown in view above. Approximately 0.94 cfs was being diverted at this location.

